

849 NW State Road 45
Newberry, FL 32669 USA
Phone: 888.472.2424 or 352.472.5500
Fax: 352.472.2030
Email: info@timcoengr.com
Website: www.timcoengr.com

FCC PART 15 B CLASS B TEST REPORT

Applicant	MOTOROLA MOBILITY, INC.
Address	600 NORTH U.S. HWY 45 LIBERTYVILLE ILLINOIS 60048-5343 USA
Model Number	XT626
Product Description	PORTABLE iDEN PHONE
Date Sample Received	4/26/2012
Date Tested	5/10/2012
Tested By	JOHN DAY
Approved By	MARIO R. DE ARANZETA
Report Number	1064JUT12TestReport_Rev.doc
Test Results	☒ PASS ☐ FAIL

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**



Testing Certificate # 0955-01

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APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

The test results only relate to the item tested.

Summary

The device under test does:

- ☒ fulfill the general approval requirements as identified in this test report
☐ not fulfill the general approval requirements as identified in this test report

Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025: 2005 requirements.



Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, FL 32669



Authorized Signatory Name:

Mario de Aranzeta C.E.T.
Compliance Engineer/ Lab. Supervisor

Date: 5/10/2012

APPLICANT: MOTOROLA MOBILITY, INC.

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REPORT SUMMARY

Applicable Rule(s)	Pt 15.109, Pt 15.107, ANSI C63.4: 2003
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TEST ENVIRONMENT

Test Facility	Timco Engineering, Inc. 849 NW State Road 45 Newberry, FL 32669 USA.
Test Condition in the laboratory	Temperature: 26°C Relative humidity: 50%

TEST SETUP SUMMARY

Test Setup Diagram/Description	The DUT was placed on the turntable per setup per ANSI C63.4: 2003. A test set up photo is provided for clarification.
Deviation from the standard/procedure	No deviation
Modification of DUT	No modification

SUPPORTING PERIPHERAL EQUIPMENT

FOR HDMI: Samsung Monitor

APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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DUT SPECIFICATION

DUT Description	PORTABLE iDEN PHONE
Model Number	XT626
SN	364PNG04X2
DUT Power Source	☐ 110–120Vac/50– 60Hz
	☐ DC Power
	☒ Battery Operated Exclusively
Test Item	☐ Prototype
	☒ Pre-Production
	☐ Production
Type of Equipment	☐ Fixed
	☐ Mobile
	☒ Portable
Laboratory Test Conditions	Temperature: 26°C
	Humidity: 55%
Modifications to DUT:	☒ No ☐ Yes (explanation below)

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TEST EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3-Meter Semi-Anechoic Chamber	Panashield	N/A	N/A		05/10/10
Analyzer Open-Frame Tower Preamplifier	HP	8449B	3008A01075	07/22/09	09/15/13
Analyzer Open-Frame Tower Quasi-Peak Adapter	HP	85650A	2043A00305	10/26/09	09/15/13
Analyzer Open-Frame Tower RF Preselector	HP	85685A	3107A01282	07/22/09	09/15/13
Analyzer Open-Frame Tower Spectrum Analyzer	HP	8566B/ 85662A	2627A03154/ 2648A14276	07/22/09	09/15/13
Antenna: Biconnical	Eaton	94455-1	1057	05/31/11	05/31/13
Antenna: Biconnical	Eaton	94455-1	1096	05/04/11	05/04/13
Antenna: Double-Ridged Horn	Electro-Metrics	RGA-180	2319	07/18/07	07/18/09
Antenna: Log-Periodic	Electro-Metrics	LPA-25	1122	05/04/11	05/04/13
Power Line Coupling/Decoupling Network	Fischer Custom Communications	FCC-801-M2-16A	01048	01/04/11	01/04/13
Power Line Coupling/Decoupling Network	Fischer Custom Communications	FCC-801-M3-16A	01060	01/04/11	01/04/13

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TEST PROCEDURES

Power line conducted Emission: The test procedure used was ANSI C63.4-2003. The spectrum was scanned from 0.15 to 30 MHz.

Radiation Interference: The test procedure used was ANSI C63.4-2003 using a spectrum analyzer with preselector. The resolution bandwidth used was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The video bandwidth was always greater than or equal to the RBW.

The unit under test was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes. The frequency was scanned from 30 MHz to 1.0 GHz. The DUT was measured in three (3) orthogonal planes when necessary.

Formula of Conversion Factors: The field strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V) to the antenna correction factor supplied by the antenna manufacturer plus the coax loss. The antenna correction factors are stated in terms of dB. The gain of the preselector was accounted for in the spectrum analyzer meter reading.

Example:

Freq (MHz)	Meter Reading	+ ACF	+CL	= FS
33	20 dB μ V	+ 10.36 dB/m	+0.40 dB	=30.76 dB μ V/m @ 3m

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RADIATED SPURIOUS EMISSIONS

Rules Part No.: 15.109

Requirements:

Frequency MHz	Limits
30 – 88	40.0 dB μ V/m measured @ 3 meters
88 – 216	43.5 dB μ V/m measured @ 3 meters
216 – 960	46.0 dB μ V/m measured @ 3 meters
Above 960	54.0 dB μ V/m measured @ 3 meters

Test Data – Wi-Fi:

Emission Frequency MHz	Meter Reading dB μ V	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dB μ V/m	Margin dB
76.20	3.8	H	0.59	6.53	10.92	29.08
76.20	6.5	V	0.59	6.53	13.62	26.38
85.80	4.3	H	0.61	7.09	12.00	28.00
85.80	7.5	V	0.61	7.09	15.20	24.80
104.90	4.1	H	0.65	11.59	16.34	27.16
104.90	7.9	V	0.65	11.59	20.14	23.36
133.50	5.0	H	0.68	12.90	18.58	24.92
133.50	8.9	V	0.68	12.90	22.48	21.02
371.80	4.0	H	1.17	15.35	20.52	25.48
371.80	13.1	V	1.17	15.35	29.62	16.38
381.40	4.4	H	1.18	15.67	21.25	24.75
381.40	16.6	V	1.18	15.67	33.45	12.55
390.90	4.6	H	1.19	16.12	21.91	24.09
390.90	9.6	V	1.19	16.12	26.91	19.09
400.40	4.3	H	1.20	16.30	21.80	24.20
400.40	9.0	V	1.20	16.30	26.50	19.50
409.40	3.9	H	1.21	16.21	21.32	24.68
409.90	10.9	V	1.21	16.20	28.31	17.69
419.50	5.9	H	1.22	16.68	23.80	22.20
419.50	14.5	V	1.22	16.68	32.40	13.60
429.00	4.7	H	1.23	17.33	23.26	22.74
429.00	8.1	V	1.23	17.33	26.66	19.34

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Test Data – Bluetooth:

Emission Frequency MHz	Meter Reading dBμV	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dBμV/m	Margin dB
76.30	4.8	H	0.59	6.52	11.91	28.09
76.30	7.1	V	0.59	6.52	14.21	25.79
85.80	5.5	H	0.61	7.09	13.20	26.80
85.80	7.0	V	0.61	7.09	14.70	25.30
104.90	4.0	H	0.65	11.59	16.24	27.26
104.90	7.7	V	0.65	11.59	19.94	23.56
121.80	4.9	H	0.67	13.09	18.66	24.84
121.80	7.6	V	0.67	13.09	21.36	22.14
133.50	4.5	H	0.68	12.90	18.08	25.42
133.50	6.8	V	0.68	12.90	20.38	23.12
371.80	4.0	H	1.17	15.35	20.52	25.48
371.80	11.7	V	1.17	15.35	28.22	17.78
381.40	5.6	H	1.18	15.67	22.45	23.55
381.40	16.4	V	1.18	15.67	33.25	12.75
390.90	5.5	H	1.19	16.12	22.81	23.19
390.90	10.2	V	1.19	16.12	27.51	18.49
400.40	5.7	H	1.20	16.30	23.20	22.80
400.40	8.2	V	1.20	16.30	25.70	20.30
409.90	4.8	H	1.21	16.20	22.21	23.79
409.90	10.1	V	1.21	16.20	27.51	18.49
419.50	8.0	H	1.22	16.68	25.90	20.10
419.50	14.5	V	1.22	16.68	32.40	13.60
429.00	4.5	H	1.23	17.33	23.06	22.94
429.00	9.2	V	1.23	17.33	27.76	18.24

APPLICANT: MOTOROLA MOBILITY, INC.

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Test Data – iDEN Phone:

Emission Frequency MHz	Meter Reading dBμV	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dBμV/m	Margin dB
74.23	14.3	H	0.58	6.83	21.71	18.29
74.23	19.3	V	0.58	6.83	26.71	13.29
130.80	22.0	V	0.68	12.90	35.58	7.92
130.80	23.2	H	0.68	12.90	36.78	6.72
135.30	21.9	V	0.69	12.91	35.50	8.00
135.30	22.1	H	0.69	12.91	35.70	7.80
272.40	23.0	H	1.04	14.47	38.51	7.49
272.40	24.0	V	1.04	14.47	39.51	6.49
445.50	16.0	V	1.25	17.55	34.80	11.20
445.60	14.0	H	1.25	17.54	32.79	13.21

APPLICANT: MOTOROLA MOBILITY, INC.

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Test Data – HDMI:

Emission Frequency MHz	Meter Reading dBμV	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dBμV/m	Margin dB
74.23	14.3	H	0.58	6.83	21.71	18.29
74.23	19.3	V	0.58	6.83	26.71	13.29
130.80	22.0	V	0.68	12.90	35.58	7.92
130.80	23.2	H	0.68	12.90	36.78	6.72
135.30	21.9	V	0.69	12.91	35.50	8.00
135.30	22.1	H	0.69	12.91	35.70	7.80
272.40	23.0	H	1.04	14.47	38.51	7.49
272.40	24.0	V	1.04	14.47	39.51	6.49
445.50	16.0	V	1.25	17.55	34.80	11.20
445.60	14.0	H	1.25	17.54	32.79	13.21

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POWER LINE CONDUCTED INTERFERENCE

Rules Part No.: Part 15.107

Requirements:

Frequency (MHz)	Quasi Peak Limits (dB μ V)	Average Limits (dB μ V)
0.15 – 0.5	66 – 56 *	56 – 46 *
0.5 – 5.0	56	46
5.0 – 30	60	50
* Decrease with logarithm of frequency		

Test Data: The following plots represent the emissions read for power line conducted. Both lines were observed.

THE FOLLOWING TEST DATA IS FOR THE PHONE IN HDMI MODE:

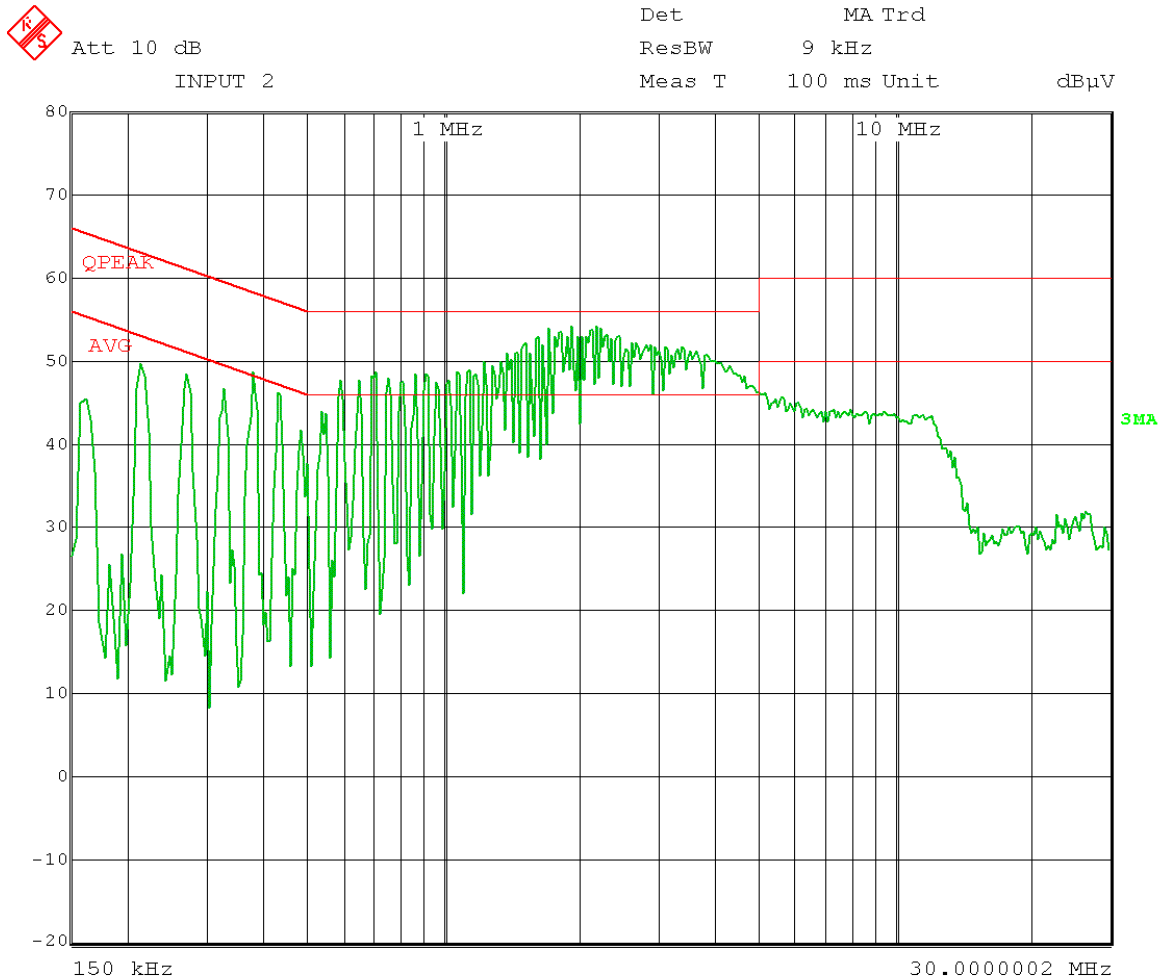
APPLICANT: MOTOROLA MOBILITY, INC.

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PEAK

POWERLINE CONDUCTED EMISSIONS – LINE 1



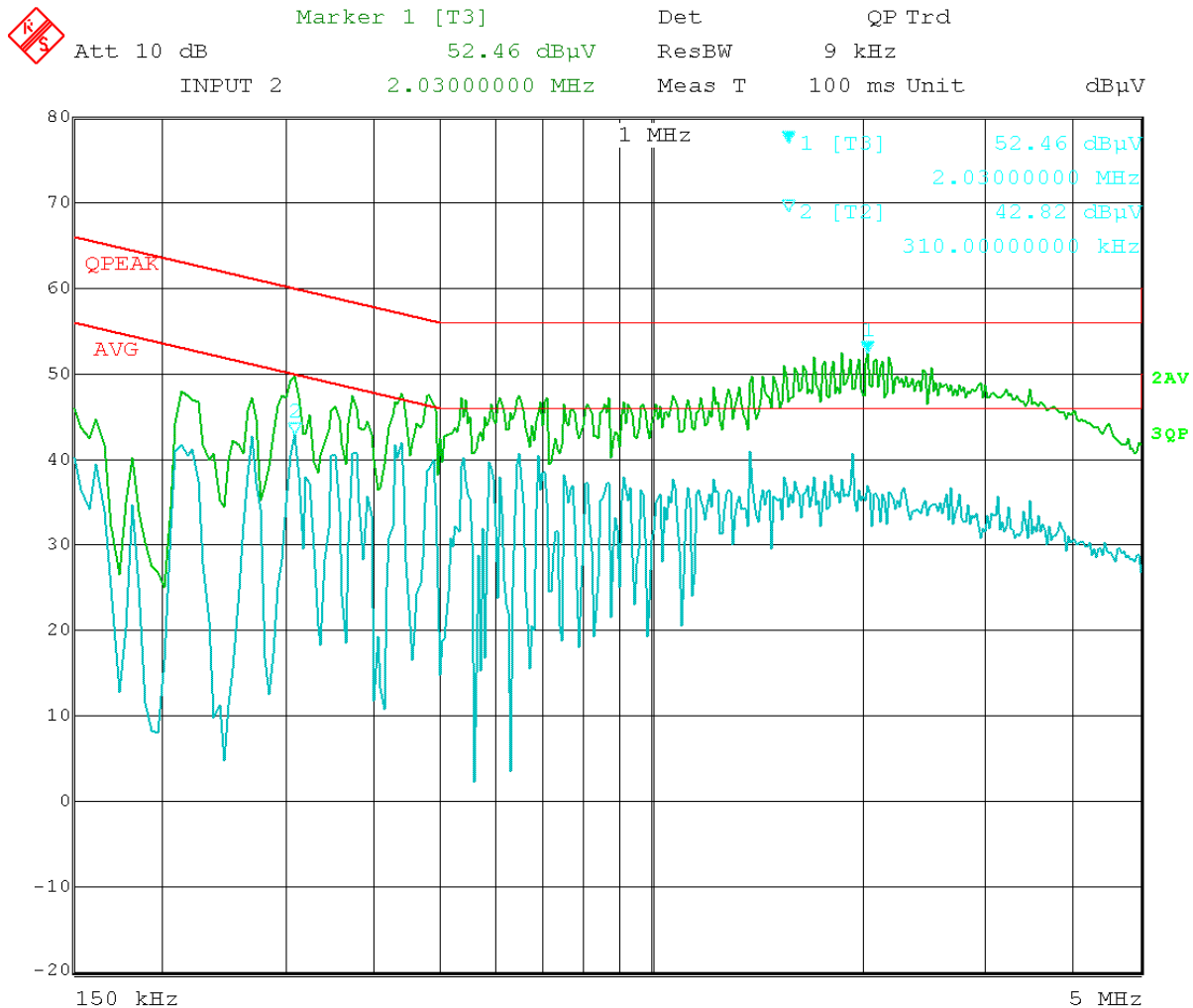
Date: 11.MAY.2012 15:22:27

APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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POWERLINE CONDUCTED EMISSIONS – LINE 1 Quasi-Peak (green) and Average (blue)



Date: 11.MAY.2012 15:45:03

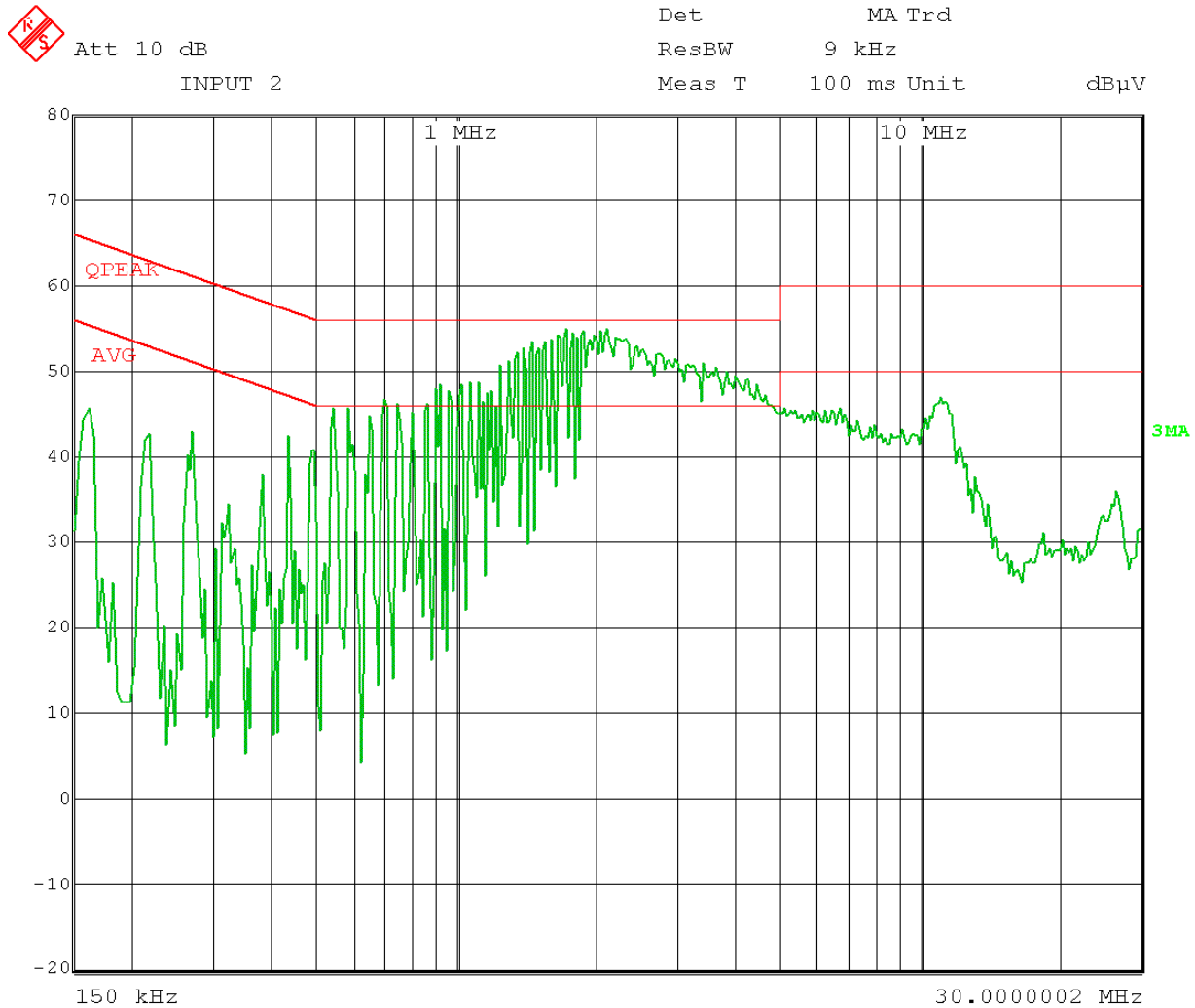
APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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PEAK

POWERLINE CONDUCTED EMISSIONS – LINE 2



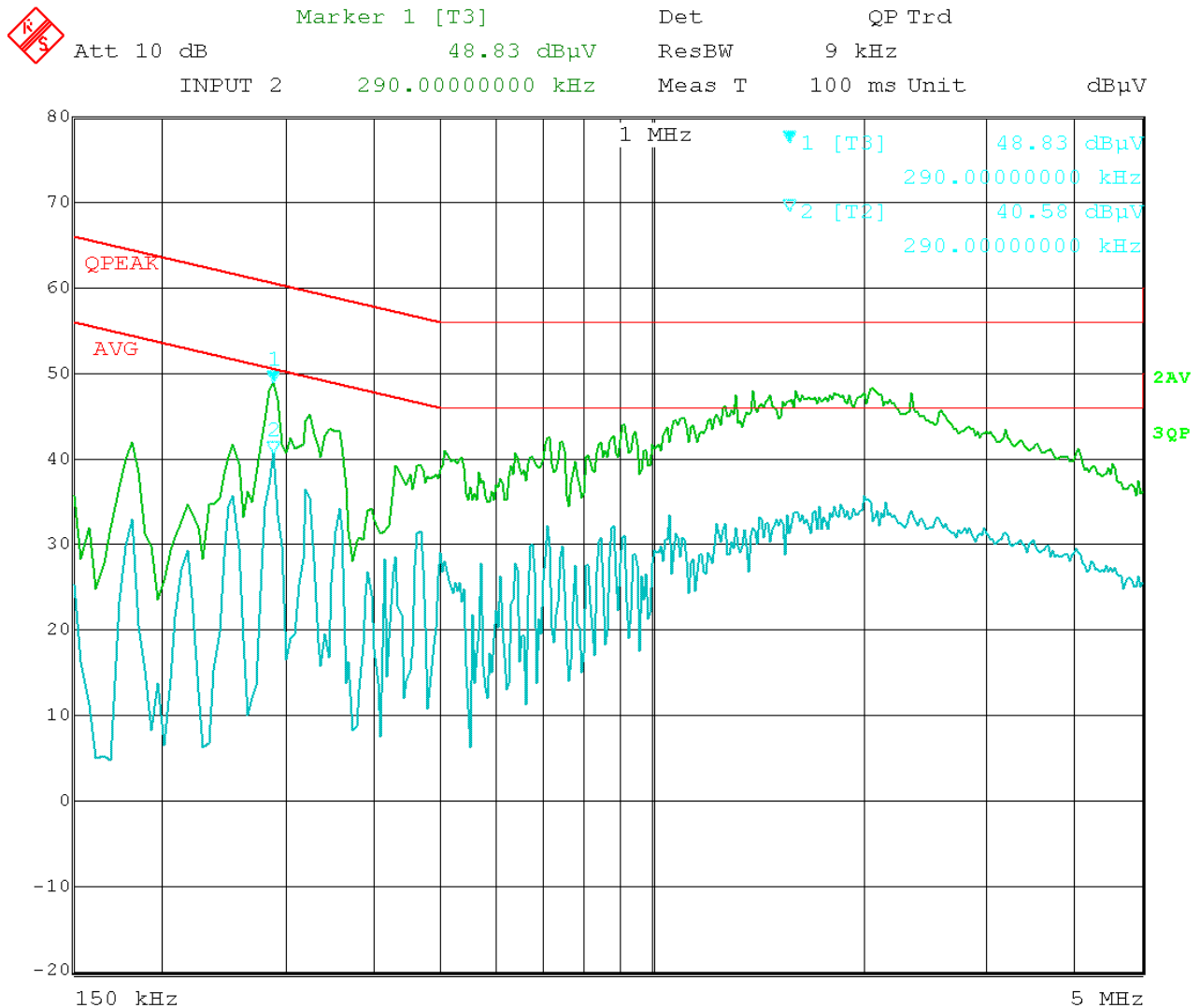
Date: 11.MAY.2012 15:23:45

APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

REPORT: O:\M\MOTOROLA IL LL\1064JUT12\1064JUT12TestReport_Rev 2.doc

POWERLINE CONDUCTED EMISSIONS – LINE 2 Quasi-Peak (green) and Average (blue)



Date: 11.MAY.2012 15:57:39

APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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DECLARATION OF CONFORMITY INFORMATION

The following FCC rules are applicable to product subject to the declaration of conformity process:

§ 2.1077 Compliance information

(a) If a product must be tested and authorized under a Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information:

(1) Identification of the product, e.g., name and model number;

(2) A statement, similar to that contained in §15.19(a)(3) of this chapter, that the product complies with part 15 of this chapters; and

(3) The identification, by name, address and telephone number, of the responsible party, as defined in §2.909. The responsible party for a Declaration of Conformity must be located within the United States.

...

(c) The compliance information statement shall be included in the user's manual or as a separate sheet.

§ 2.909 Responsible party

...

(c) In the case of equipment subject to authorization under the Declaration of Conformity procedure:

(1) The manufacturer or, if the equipment is assembled from individual component parts and the resulting system is subject to authorization under a Declaration of Conformity, the assembler.

(2) If the equipment, by itself, is subject to a Declaration of Conformity and that equipment is imported, the importer.

(3) Retailers or original equipment manufacturers may enter into an agreement with the responsible party designated in paragraph (c)(1) or (c)(2) of this section to assume the responsibilities to ensure compliance of equipment and become the new responsible party.

(4) If the radio frequency equipment is modified by any party not working under the authority of the responsible party, the party performing the modifications, if located within the U.S., or the importer, if the equipment is imported subsequent to the modifications, becomes the new responsible party.

...

Please find on the following page, a sample compliance information statement:

APPLICANT: MOTOROLA MOBILITY, INC.

MODEL: XT626

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DECLARATION OF CONFORMITY (SAMPLE)

The responsible party declares that this device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: MOTOROLA MOBILITY, INC.

Address: 600 NORTH U.S. HWY 45
LIBERTYVILLE ILLINOIS 60048-5343 USA

Tel:

Fax:

Printed Name/Title:

Signature:

Product Description: PORTABLE iDEN PHONE

Model Name: XT6256

Trade/Brand Name: MOTOROLA

Applicant: MOTOROLA MOBILITY, INC.

Address: 600 NORTH U.S. HWY 45
LIBERTYVILLE ILLINOIS 60048-5343 USA

Report Number: 1064JUT12TestReport.doc

Date: MAY 15, 2012